

What is claimed is:

1. A light-emitting device comprising:

a light source body generating light; and

5 a plurality of resonant layers, each resonating the light with a predetermined wavelength, each of the wavelengths of the light resonated by the resonant layers being different from at least one of the other wavelengths of the light resonated by the resonant layers.

10 2. The light-emitting device according to claim 1, wherein the light source body emits white light.

3. The light-emitting device according to claim 1, wherein the light source body is an organic electroluminescent device.

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4. The light-emitting device according to claim 3, wherein the organic electroluminescent device includes an organic electroluminescent layer and electrodes that are combined with at least one of the resonant layers.

20 5. The light-emitting device according to claim 1, wherein the plurality of resonant layers is formed adjacent to each other in a direction in which the resonant layers overlap.

6. The light-emitting device according to claim 1, wherein each of the plurality of resonant layers is formed at a distance from each other in a direction in which the resonant layers overlap.

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7. The light-emitting device according to claim 1, wherein at least one of the plurality of resonant layers is flexible.

8. The light-emitting device according to claim 1, wherein at least one of the
10 resonant layers includes first and second reflectors that partially reflect light, the first reflector with a first reflecting surface being arranged on a first side through which the light is output, the second reflector with a second reflecting surface being arranged on a second side opposite to the first side, the first reflecting surface facing the second reflecting surface, whereby the resonant layer
15 resonates the light with the predetermined wavelength.

9. The light-emitting device according to claim 8, wherein the organic electroluminescent device includes an electrode, at least one of the first and second reflectors being combined with the electrode.

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10. The light-emitting device according to claim 8, wherein at least one of the reflectors serves as the reflector for the plurality of resonant layers.

11. The light-emitting device according to claim 8, wherein the second reflector totally reflects the light.

5 12. A display unit comprising:

a liquid crystal display; and

a light-emitting device arranged at the back side of the liquid crystal display so as to serve as a backlight, the light -emitting device including:

a light source body generating light; and

10 a plurality of resonant layers, each resonating the light with a predetermined wavelength, each of the wavelengths of the light resonated by the resonant layers being different from at least one of the other wavelengths of the light resonated by the resonant layers.

15 13. The display unit according to claim 12, wherein at least one of the resonant layer includes a first and second reflectors that partially reflect light, the first reflector with a first reflecting surface being arranged on a first side through which the light is output, the second reflector with a second reflecting surface being arranged on a second side opposite to the first side, the first reflector facing
20 the second reflecting surface, whereby the resonant layer resonates the light with the predetermined wavelength.

14. The display unit according to claim 12, wherein the liquid crystal display includes a color filter, the light emitted from the light-emitting device includes a plurality of colors, at least one of the lights resonated by the light-emitting device penetrates the color filter.

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15. The display unit according to claim 14, wherein the color filter includes red, green and blue colors.

16. A lighting unit comprising:

10 a light-emitting device as a light source including:

a light source body generating light; and

a plurality of resonant layers, each resonating light with a predetermined wavelength, each of the wavelengths of the light resonated by the resonant layers being different from at least one of the other wavelengths of the light resonated by the resonant layers.

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17. A light-emitting device comprising:

a light source body generating light;

a first reflector partially reflecting the light, the first reflector with a reflecting surface being arranged at a first side through which the light is output;

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a second reflector partially reflecting the light, the second reflector with a first reflecting surface and a second reflecting surface being arranged adjacent to

the first reflector at a second side opposite to the first side, the reflecting surface of the first reflector facing the first reflecting surface of the second reflector; and

a third reflector partially reflecting the light, the third reflector with a reflecting surface being arranged adjacent to the second reflector at the second side, the reflecting surface of the third reflector facing the second reflecting surface of the second reflector, the first, second and third reflectors being formed so as to satisfy the following equations:

$$t1 = (n1 \times \lambda1) / 2$$

$$t2 = (n2 \times \lambda2) / 2$$

$$10 \quad t1 + t2 = (n3 \times \lambda3) / 2$$

wherein t1 denotes the distance between the reflecting surface of the first reflector and the first reflecting surface of the second reflector, t2 denoting the distance between the second reflecting surface of the second reflector and the reflecting surface of the third reflector, $\lambda1$ denoting a wavelength of a first resonated light, $\lambda2$ denoting a wavelength of a second resonated light, $\lambda3$ denoting a wavelength of a third resonated light, n1, n2 and n3 being natural numbers.

18. The light-emitting device according to claim 17, wherein the resonated light having the wavelengths $\lambda1$, $\lambda2$ and $\lambda3$ are respectively blue light, green light and red light.

19. The light-emitting device according to claim 17, wherein the third reflector totally reflects the light.

20. A light-emitting device comprising:

5 a light source body generating light; and

a plurality of reflectors partially reflecting the light, the plurality of reflectors being arranged in a direction in which the plurality of reflectors overlaps, the plurality of reflectors resonating light having wavelengths λ_1 , λ_2 and λ_3 , the light-emitting source being formed so as to satisfy the following equations:

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$$t_1 = (m_1 \times \lambda_1) / 2$$

$$t_2 = (m_2 \times \lambda_2) / 2$$

$$t_3 = (m_3 \times \lambda_3) / 2$$

wherein t_1 denotes the distance between the reflectors that resonate the light having the wavelength λ_1 , t_2 denoting the distance between the reflectors
15 that resonate the light having the wavelength λ_2 , t_3 denoting the distance between the reflectors that resonate the light having the wavelength λ_3 .

21. The light-emitting device according to claim 20, wherein at least one of the reflectors resonates light having a plurality of wavelengths.

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22. The light-emitting device according to claim 20, wherein the resonated light having the wavelengths λ_1 , λ_2 and λ_3 are respectively blue light, green light

and red light.

23. The light-emitting device according to claim 20, wherein the reflector arranged at a second side opposite to a first side through which the light is output
- 5 totally reflects light.